

Amendments to the Claims

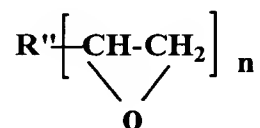
Please cancel Claims 1-25. Please add new Claims 26-50. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1.-25. (Cancelled)

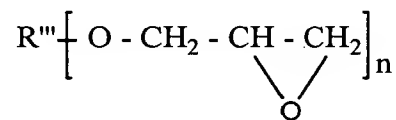
26. (New) A method for the production of prepolymers from polysulfides and polyepoxides, comprising the step of reacting polyepoxides with polysulfides which have at least two mercapto groups in the presence of quaternary ammonium compounds as a catalyst at a temperature of 20 - 100°C.

27. (New) The method as claimed in claim 26, characterized in that compounds of the formula



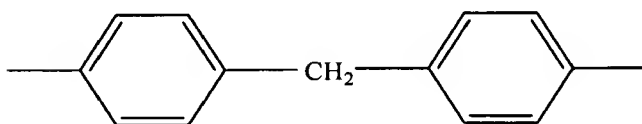
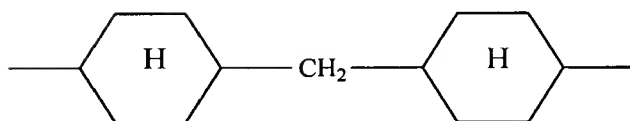
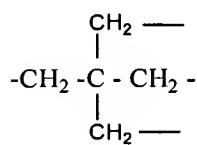
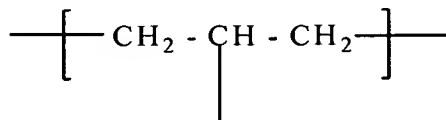
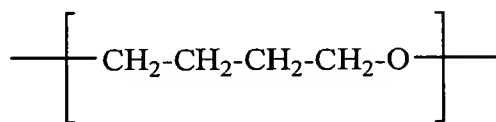
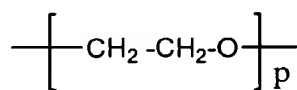
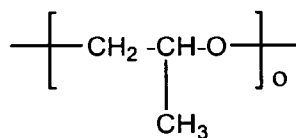
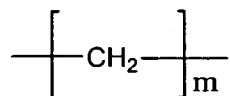
in which $n = 2 - 4$ and R'' is an organic radical having an aliphatic, aromatic, or cycloaliphatic basic structure, are used as polyepoxides.

28. (New) The method as claimed in claim 26, characterized in that compounds of the formula

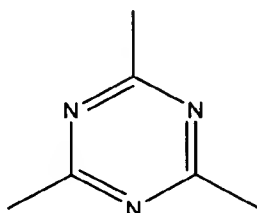
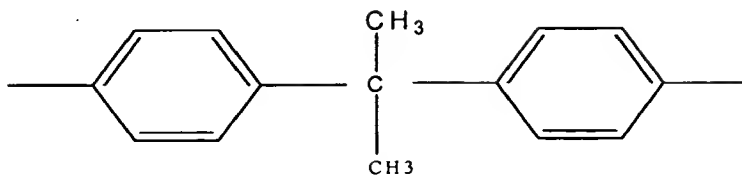


in which $n = 2 - 4$ and R''' is an organic radical having an aliphatic, aromatic, or cycloaliphatic basic structure, are used as polyepoxides.

29. (New) The method as claimed in claim 27, characterized in that the organic radical is selected from the group consisting of the following radicals:



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in which $m = 2 - 10$, $o = 1 - 50$ and $p = 1 - 50$.

30. (New) The method as claimed in claim 26, characterized in that the epoxides used are unmodified epoxy resins and novolacs.
31. (New) The method as claimed in claim 26, characterized in that mixtures of epoxides are used.
32. (New) The method as claimed in claim 26, characterized in that polysulfides of the formula

$$\text{H} - \left[\text{S} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{S} \right]_q \left[\text{S} - \text{CH}_2 - \underset{\text{SH}}{\text{CH}} - \text{CH}_2 - \text{S} \right]_r \text{H}$$
 are used, in which $q = 4 - 30$ and $r = 0 - 3$.
33. (New) The method as claimed in claim 26, characterized in that the reaction is carried out in a molar ratio of 1 mol of polysulfide to 2 ± 0.2 mol of polyepoxide.
34. (New) The method as claimed in claim 33, characterized in that the reaction is carried out in the stoichiometric ratio 1:2.

35. (New) The method as claimed in claim 26, characterized in that the reaction is carried out in a molar ratio of 2 mol of polysulfide to 1 ± 0.1 mol of polyepoxide.
36. (New) The method as claimed in claim 35, characterized in that the reaction is carried out in a stoichiometric ratio of 2:1.
37. (New) The method as claimed in claim 26, characterized in that the starting component determining the functionality of the prepolymer is used in a stoichiometric excess.
38. (New) The method as claimed in claim 37, characterized in that a 2- to 7-fold stoichiometric excess is used.
39. (New) The method as claimed in claim 26, characterized in that polysulfide is initially introduced and polyepoxide is metered in.
40. (New) The method as claimed in claim 26, characterized in that polyepoxide is initially introduced and polysulfide is metered in.
41. (New) The method as claimed in claim 39, characterized in that metering is effected into a vessel which already contains the catalyst used.
42. (New) The method as claimed in claim 39, characterized in that the catalyst is concomitantly metered into the vessel during the reaction.
43. (New) The method as claimed in claim 26, characterized in that the catalyst used is methyltrioctylammonium chloride.
44. (New) The method as claimed in claim 26, characterized in that the polyepoxide used is bisphenol A diglycidyl ether or bisphenol F diglycidyl ether.

45. (New) The method as claimed in claim 44, characterized in that mixtures of the two polyepoxides are used.
46. (New) The method as claimed in claim 26, characterized in that the reaction is carried out in vacuo, preferably at a pressure of 10-100 mbar.
47. (New) The method as claimed in claim 26, characterized in that the reaction is carried out with stirring.
48. (New) The method as claimed in claim 47, characterized in that the reaction is carried out at a temperature of from 40 to 150°C, in particular 40-100° C.
49. (New) The method as claimed in claim 48, characterized in that the reaction is carried out at temperatures of from 50 to 70°C.
50. (New) A storage-stable prepolymer produced by a method as claimed in claim 26.